Baltimore Vegetation Management Project Scoping Information and Request for Public Comments

Overview of the Project Area

The Baltimore project area is located on the Ottawa National Forest, Ontonagon and Bergland Ranger Districts, approximately 4 miles north of Bruce Crossing, MI and lies to the east and west of US Highway 45 (see attached Vicinity Map). The project area encompasses a total of approximately 35,900 acres, approximately 28,475 acres are National Forest System lands, and is located within the following legal description: T49N R38W, Sections 18, 19, 30; T49N R39W, Sections 1 - 36; T49N R40W, Sections 1 - 4, 8 - 17, 20 - 28, 33 - 36; and T50N R39W, Sections 27, 31 - 35, all located in Ontonagon County, Michigan. The project area is comprised of National Forest System lands, including lands acquired in 1992 from UPPCO (Upper Peninsula Power Company), and has parcels of private land scattered throughout.

The creeks within the project area include Johnson Creek, Schaat Creek, Erickson Creek, Plover Creek, Sandstone Creek, Hide Creek, Lathrop Creek, and part of Inkala Creek. Rivers within the project area include part of the Baltimore River, parts of the Middle and East Branches of the Ontonagon River, and other parts of the Middle, South and West Branches of the Ontonagon River that serve as a natural border for the project area.

Similar to the history of the Upper Peninsula, the project area was logged over in the late 1800s to early 1900s. Currently, forest types within and adjacent to the project area are primarily second growth aspen, lowland hardwoods, and northern hardwoods, with a component of mixed conifers throughout. The dominant landforms in the project area are Land Type Associations (LTAs) 19 and 20. LTA 19 is a nearly level, glacial lake plain, with clayey soils where water movement through the soil is very slow. It features aspen and northern hardwood forests and is found in the majority of this area. LTA 20 is mostly found in the very steep, unstable river valley walls, valley bottoms, and floodplains. The dominant potential vegetation for the project area is the Tsuga-Thuja (hemlock-northern white cedar) series and the Fraxinus (black ash – white ash) series.

Desired Future Conditions for Project Area

The Ottawa National Forest Land and Resource Management Plan (Forest Plan) sets goals and direction for the management of the Ottawa National Forest. The Forest is divided into Management Areas (MAs), each with its specific desired future condition (DFC). Approximately 89.6% of the project area is included within MA 1.1, which is defined in the Forest Plan on pages IV-103 to IV-111. The remaining 10.4% includes MA 8.1 (5.8%; pages IV-187.1 to IV 187.12), MA 9.2 (3.7%; pages IV-201 to IV 207.4), and MA 9.3 (0.9%; pages IV-208 to IV-213). The Forest Plan directs that MA 1.1 should be managed using the following management prescription to obtain its DFC:

- Emphasize early successional community types (plant and animal) within a roaded natural motorized recreational environment.
- Maintain potential conditions for moderate to high populations of game species such as deer and ruffed grouse and nongame species such as golden-winged warbler.
- Maintain moderate to high amounts of Aspen type along with associated timber products and habitat conditions.
- Provide an appearance that is predominantly forested with frequent temporary openings.

Some of the early successional community types that would result from implementing this management prescription would consist of Aspen, Paper Birch, and Balsam Fir. These would provide some of the conditions needed for moderate to high populations of the game species mentioned. The roaded natural environment would provide both motorized and non-motorized recreationists with access for a high degree of interaction throughout the natural environment.

The Forest Plan directs that MA 8.1, Designated Wild & Scenic Rivers, be managed to emphasize land and resource conditions that will provide for the protection and management of designated Wild & Scenic River corridors within the Ottawa National Forest. The MA 8.1 portion of the project area contains part of the corridors

along the Middle and West Branches of the Ontonagon River. Approximately 13.5 miles of the Middle Branch of the Ontonagon River that flows along the eastern project boundary is designated as a wild segment. The approximate 4.6-mile segment of the West Branch of the Ontonagon River that flows from its confluence with the South Branch to Victoria Reservoir along the northwestern project boundary is designated as a recreational segment. The Standards and Guidelines established for this MA will maintain and/or enhance the character of the existing river environment within the corridors of these rivers. To obtain the desired condition of the land, the river corridors in this MA will be managed to protect, enhance, and retain the outstandingly remarkable resource values for which they were designated under the Michigan Wild and Scenic Rivers Act of 1991.

The Forest Plan directs that MA 9.2, Wild & Scenic Study Rivers, be managed to emphasize land and resource conditions that will provide for the interim protection and management of study river corridors on National Forest System land administered by the Ottawa National Forest. The MA 9.2 portion of the project area contains part of the corridor of the South Branch of the Ontonagon River, designated as a study segment that forms 11.8 miles of the western project boundary. The Standards and Guidelines established for this MA will enable the retention of the existing river environment of this river corridor until such time as the appropriate studies can be accomplished to determine if a recommendation for inclusion into the Wild and Scenic Rivers System is warranted. At this time, and to obtain the desired condition of the land, the river corridor in this MA will be managed to perpetuate the existing river environment. This strategy will enable the river corridor involved to retain the characteristics that qualify it for consideration as potential addition to the National Wild and Scenic Rivers System.

The outstandingly remarkable values (ORVs) for which the Middle Branch of the Ontonagon River was designated include fishery, scenic, and recreational. The ORV that the West Branch of the Ontonagon River was designated is scenic. The South Branch of the Ontonagon River is being studied for ORVs that include scenic, recreational, geological, and fishery. (USDA Forest Service, 1989)

The Forest Plan directs that MA 9.3 should be managed using the following management prescription to obtain its DFC:

- Protect and maintain environmental values.
- Protect the health and safety of the public.

MA 9.3 in the project area contains a portion of the lands acquired in 1992 from UPPCO. The portion within the project boundary encompasses segments of the Ontonagon River, but it lies outside the original Forest proclamation boundary. The DFC for MA 9.3 is that forest vegetation is natural appearing, and management activities should include only those needed for the following reasons:

- To protect life, health, and safety of incidental users.
- To prevent environmental damage caused by water, soil, pests, or fire on land of other ownership or downstream areas.
- To administer unavoidable non-Forest Service special uses.
- To meet other legal requirements.

Purpose and Need for the Proposed Action

The purpose and need for this project is to implement the Forest Plan by improving or maintaining habitat conditions to promote long-term ecosystem health for the benefit of people and all other resources. Comparing current conditions within MA 1.1 (see the Ottawa National Forest Monitoring and Evaluation Report – FY 1997 and FY 1998, pages 113-118) to the desired future conditions described in the Forest Plan (pages IV-103 to IV-111, esp. Table 1.1a) revealed that this area has not attained all the characteristics of the DFC described in the Forest Plan. As a result, the following needs have been identified:

- Identify opportunities to improve the percentage of upland openings while maintaining the existing levels and improving wildlife habitat.
- Maintain existing levels of early successional forest types and associated habitat.
- Improve the percentage of softwood sawtimber and pulp.
- Maintain existing levels of hardwood sawtimber and pulp with an emphasis on even-aged management.
- Improve the quality and growth of forest stands.

- Address stands suitable for old growth classification for both managed and unmanaged old growth characteristics.
- Develop a long-term transportation plan that is needed and can be maintained.
- Improve stream habitat and watershed condition in the project area.
- Provide for recreational/hunting needs.
- Provide for the local economy.

Below is a more detailed comparison of Table 1.1a from the Forest Plan (p. IV-105), to Table II.19 (p. 115) in the Ottawa National Forest FY97 & 98 Monitoring and Evaluation Report, along with the current road density vs. desired road density described in the Forest Plan (p. IV-111). This comparison for MA 1.1 indicates the following:

Comparison of current conditions within Management Area 1.1 Forestwide and current conditions within Management Area 1.1 for the Baltimore Project Area, to the Desired Future Conditions as described in the Forest Plan. *

Resource Issue	Current Conditions	Desired Future Conditions
Percent of area in Upland Openings		
Forestwide MA 1.1	1 Percent	1-5 Percent
Baltimore Project Area MA 1.1	1 Percent	1-5 Percent
Percent of area in Aspen		
Forestwide MA 1.1	58 Percent	40-60 Percent
Baltimore Project Area MA 1.1	71 Percent	40-60 Percent
Percent of area in Softwood Sawtimber		
Forestwide MA 1.1	10 Percent	5-10 Percent
Baltimore Project Area MA 1.1	3 Percent	5-10 Percent
Percent of area in Softwood Pulp		
Forestwide MA 1.1	13 Percent	10-20 Percent
Baltimore Project Area MA 1.1	6 Percent	10-20 Percent
Percent of area in Hardwood Sawtimber		
and Pulp		
Forestwide MA 1.1	19 Percent	5-20 Percent
Baltimore Project Area MA 1.1	20 Percent	5-20 Percent
Percent of area classified as Old Growth		
Forestwide MA 1.1	1 Percent	1-3 Percent
Baltimore Project Area MA 1.1	0 Percent	1-3 Percent
Percent of northern hardwood type even-		
aged management	78 Percent	85-95 Percent
Percent of northern hardwood type		
uneven-aged management	22 Percent	5-15 Percent
Road density (National Forest roads on		
National Forest Lands in MA 1.1 portion	3.6 mi/ sq. mi	$2\frac{1}{2} - 3\frac{1}{2}$ mi/ sq. mi. for MA 1.1
of project area)	·	

^{*}Figures in the table are taken from the Forest's database. Mapping and delineation is being finalized, so figures in the environmental impact statement may vary slightly.

After looking at the data contained in the table above, the Forest Service has concluded that, relative to the objectives set forth in the Forest Plan:

- a) The proportion of upland openings maintained for wildlife and early successional plant species is at the low end of the desired range and could be increased.
- b) The percent of area in Aspen is not within the desired range for the MA 1.1 portion of the project area.
- c) The percent of area in softwood sawtimber and pulp is not within the desired range for the MA 1.1 portion of the project area,
- d) The MA 1.1 portion of the project area currently has no old growth classified.
- e) The percent of even-aged northern hardwoods vs. uneven-aged does not meet the DFC for the MA 1.1 portion of the project area,
- f) Current road density is not within the desired range of the DFC for MA 1.1 of the project area.

The Proposed Action, as described below, is designed to move the current conditions within the MA 1.1 portion of the project area toward the desired future conditions described in the Forest Plan. The Forest Service has concluded that the best method of moving the project area toward the DFCs is via silvicultural manipulations of existing stands, decommissioning of unneeded roads, watershed improvements, and wildlife habitat enhancement treatments. Some of these actions (e.g. tree harvest) are expected to generate revenues via sales of wood products. Other activities (e.g. watershed improvement or controlling road-generated sediment) are expected to require expenditure of federal and/or co-operative funds to implement.

Specifically, the purpose and need for action is:

Promote and maintain processes that would enhance natural species diversity while providing a supply of wood products for regional and local needs to help support a stable economic base within the market area.

The hardwood areas found within the Baltimore project area are second-growth stands that resulted from extensive cutting in the early 1900s. The stands proposed for treatment currently lack a balanced size class of trees and are above stocking levels recommended for healthy growth. Stand exam data indicates that the overstocked stands are hindering the establishment and growth of seedlings and saplings in the understory. These stands also contain many trees of poor form and quality that are competing with trees of higher potential. The aspen stands proposed for treatment are mature to overmature, subject to disease, and have received repeated defoliation from tent caterpillars over the last few years, but they are largely salvageable through timber harvest.

The Forest Plan describes the DFC for MA 1.1 as a mosaic of temporary openings and stands featuring aspen, birch, and balsam fir. Stands of even or uneven-aged northern hardwoods are also interspersed throughout the MA. Many wildlife species depend on structural characteristics of vegetation for their habitat needs. The DFC for this area is to maintain a healthy ecosystem through the use of active management. For aspen, even-aged management (clearcutting) is the optimum method for regenerating a new vigorous stand of aspen (Forest Plan Appendix C, page VI C-11) and for providing early successional habitat.

The Proposed Action was designed to move the area from the existing condition towards the DFC through evenaged management of Aspen forest types and even- and uneven-aged management of hardwoods.

Maintain and enhance habitat conditions that sustain viable populations of a variety of fish and wildlife species and enhance watershed conditions.

One of the Forestwide Management Goals as outlined in the Ottawa Forest Plan is to "Provide a variety of vegetative community types...to create a variety of habitat conditions for game and non-game species of wildlife..." (Page IV-3). In addition, the Forestwide Management Goals indicate the need to "Maintain a moderate to high amount of aspen type to provide a sustained level of habitat for white-tailed deer and ruffed grouse and to supply a sustained level of aspen timber products..." (Page IV-3). Achieving these goals and attaining the DFC for MA 1.1 within the project area, which contains the largest portions of contiguous aspen ecosystem on the forest, would require the use of primarily even-aged management to regenerate aspen. This type of management creates the desired conditions for species that require forest edge and early successional habitats within a mosaic of age classes and stand densities. It also produces habitat suited for species such as white-tailed deer, ruffed grouse, snowshoe hare, woodcock, and chestnut-sided warblers. The Baltimore area has some of the higher densities of deer found on the Ottawa Forest and above average grouse habitat, which provides excellent recreational opportunities for deer and grouse hunting.

Another Forestwide Management Goal is to "Provide an adequate amount of coniferous thermal cover for white-tailed deer and other wildlife species such as blackburnian warbler that require this important habitat component" (Page IV-3). Thus, there is a need to maintain the existing coniferous forest patches in the project area, which include stands of hemlock, cedar, red pine, balsam fir, white spruce, black spruce, and a mix of red and white pine. This will maintain a diversity of forest types and provide some limited patches of habitat in the project area for species like blackburnian and magnolia warblers, kinglets, sharp-shinned hawks, and fisher.

The Forest Plan's "Forestwide Standards and Guidelines" for riparian areas specify that we should "Preserve the beneficial values of floodplains and wetlands..." and "Minimize risk of flood loss, restore and preserve floodplain values, and protect wetlands" (Page IV-35). There are also needs within the project area to improve

riparian areas and aquatic habitats for riparian dependant species, to enhance aquatic system structure, function, and composition, and improve overall watershed conditions. There are presently three (3) road crossings on Lathrop Creek in T49N R39W - 2 that need to be decommissioned and one that needs to be repaired to deter existing erosion and help improve the aquatic habitat and overall watershed conditions. One of these crossings is located in section 14 and the other two are in section 23 (see Proposed Transportation Map).

The Forestwide Management Goal and Direction for fisheries management is to "Provide habitat to maintain viable populations of native and desired non-native fish species" (Forest Plan, page IV-12). Turn of the century logging practices diminished woody debris in rivers, including the Baltimore River. The Baltimore River is an important rearing area for juvenile lake sturgeon and there is a need to replace the large woody debris that was previously lost in order to provide rearing cover.

The Proposed Action is designed to move the area from the existing condition towards the long-term DFC through various habitat enhancement activities and watershed improvements.

Maintain a road system that allows for management of National Forest Lands and provides for public access while meeting other resource needs.

The transportation system is an important feature of the National Forest landscape that allows for the multipleuse and management of forest resources. The existing total open and closed (bermed, gated, or impassable due to vegetation) National Forest road density on National Forest Lands within MA 1.1 for the project area is approximately 3.6 miles per square mile. This roaded environment provides recreational opportunities for passenger vehicles, ATVs, snowmobiles, and other motorized recreationists. Some National Forest roads may be closed to passenger vehicle use, thereby providing motorized use only by ATVs or snowmobiles, while providing opportunities for non-motorized recreation as well.

The DFC for this area includes a transportation system that provides the most cost efficient and lowest impact transportation system needed to meet the objectives for MA 1.1 and Forest Plan goals (Forest Plan, pages IV-2 through IV-5). When supplemented by limited construction of new permanent (system) and temporary roads, and maintenance or reconstruction of existing roads as described in the Proposed Action, the proposed transportation system would meet the desired management and access needs for the project area.

System roads within the project area are in need of maintenance or reconstruction, which would include culvert installations with appropriate erosion control measures, road re-shaping, and some clearing. There is a need to move the gate on Forest Road 710 back to its original location (near the west line of section 22) because passenger vehicle use is causing rutting and resource damage. There is also a need to close and decommission some existing roads or road segments, including the decommissioning of two stream crossings on Lathrop Creek. This is because they are either no longer needed for long-term management and access needs, are causing sedimentation due to poor drainage or failed culverts, or on which vehicle use is causing, or has potential to cause, rutting and sedimentation. To aid in future maintenance, reconstruction, or new construction of the Forest transportation system, there is a need to expand the Gauthier Gravel Pit to access an existing gravel deposit. These resource concerns can be addressed through the Proposed Action while still enhancing desired recreation opportunities.

The Proposed Action was designed to continue to move the area from the existing condition toward the DFC through various construction, reconstruction, maintenance, closure, and decommissioning of National Forest roads.

Provide recreational opportunities to meet the publics' needs.

Existing dispersed recreation opportunities in this area are primarily associated with deer and grouse hunting, camping, hiking the North Country Trail (NCT), mountain biking, snowmobiling, ATV riding, and canoeing and kayaking portions of the Middle, East, West, and South Branches of the Ontonagon River.

The DFC for MA 1.1 is to "Manage passenger vehicle, off-road-vehicle (ORV), all-terrain-vehicle (ATV), and snowmobile use to provide for resource protection, remote wildlife habitat, nonmotorized recreation opportunities, and public health and safety, to reduce noise, and to minimize user conflict" (Forest Plan page IV-108). Some areas of dispersed recreation have been site-specifically identified as experiencing impacts to the

soil and water resources as a result of passenger vehicles (4X4s) and ATVs crossing wet areas via existing roads.

There is a need to harden or enhance some dispersed recreation camping sites adjacent to Forest Roads 730 and 733 that currently receive use, but have some rutting. There are also opportunities to develop some additional dispersed recreational camping sites along Forest Roads 730 and 733 to meet current and expected future demand. There is also a need to harden, enhance, and improve a dispersed canoeing, kayaking, and fishing site at the junction of the East and West Branches of the Ontonagon River near the Military Hill Bridge. This site currently receives use, but it is experiencing negative impacts to the soil and water resources through rutting and erosion.

The Proposed Action was designed to move the area from the existing condition toward the DFC by maintaining or enhancing existing recreation opportunities while protecting resources.

Provide for Public Health and Safety

Snowmobile trail #3 bisects the project area and a portion of this trail is located in the US Highway 45 (US-45) right-of-way. Within the project area this trail crosses US-45 several times and also crosses the Ontonagon River via the US-45 bridge. The present trail location creates a situation where snowmobile traffic must parallel the highway, cross the highway, and cross the Ontonagon River by traveling over and along the US-45 bridge. Because of this, snowmobile headlights are directed at oncoming vehicular traffic and a less than ideal safety situation is created for motor vehicle users on the highway and also for snowmobilers.

There is a need to improve public safety by implementing measures that reduce the distance the snowmobile trail parallels US-45, minimize the number of times the snowmobile trail crosses US-45, and provide for a separate snowmobile crossing of the Ontonagon River. Within the scope of the Baltimore project, the Forest Service can assist with a proposal for the first item: Reducing the trail distance adjacent to US-45. Proposing a new and separate snowmobile crossing of the Ontonagon River could eliminate snowmobiles having to travel over and along the US-45 bridge and reduce the number of times the trail crosses US-45, however, it is beyond the scope of this project. A new bridge, for example, is not subject to unilateral actions or decisions of the Forest Service. This action would involve other agencies such as the Michigan Department of Natural Resources and the Michigan Department of Transportation in terms of land ownership, funding, and maintenance liabilities.

The Proposed Action within the scope of this project is tiered toward the Recreation Management of Off-road Vehicles, All-terrain Vehicles, and Snowmobiles for MA 1.1, and is designed to improve the existing condition by managing "...snowmobile use to provide for resource protection...and public health and safety...and to minimize user conflict" (Forest Plan, page IV-108).

The Forest Service Natural Resource Agenda

The Forest Service Natural Resource Agenda (USDA, 1998) also supports the Purpose and Need for Action. The Natural Resource Agenda focuses on four key areas: watershed health and restoration, sustainable forest ecosystem management, forest roads, and recreation. As described above, the Proposed Action was developed to respond to these concerns, and would result in providing for well functioning riparian areas while maintaining and enhancing recreational use within the project area.

Proposed Action

The proposed action was designed by an interdisciplinary team (ID team) comprised of Forest Service personnel, and is intended to specifically address the differences between the current conditions within the project area and the DFC for MA 1.1, as described in the Forest Plan. The designated forest resource specialists developed the proposed action with information and data gathered from the project area. In developing this proposed action, the ID team reviewed the purpose and need and looked for opportunities within the project area to move conditions towards the DFC.

Compartments 72, 82 - 85, 134 - 143, and a portion of 144 and 25 on the Ontonagon Ranger District and compartments 66, 67, 101 - 105, and a portion of 100 on the Bergland Ranger District delineate the project area

boundary. Of the approximate total of 35,900 acres in the project area, there are approximately 28,475 acres of National Forest System lands. A vicinity map is attached along with maps for the existing road system, the proposed road system, proposed treatment areas, and additional projects described below. Specifically the Proposed Action would include implementation of the following management activities:

- 1. Conduct commercial timber harvest through:
 - Timber harvesting activities on approximately 3360 acres. The Proposed Action is expected to include harvest by clearcut with reserve trees on approximately 1975 acres of aspen types, selection cutting on approximately 100 acres of northern hardwood types, thinning of approximately 825 acres of northern hardwood types, shelterwood cutting on approximately 360 acres of Aspen types, and removal cutting on approximately 100 acres of northern hardwood types.
 - <u>Clearcut with reserve trees</u>: a clearcut is a regeneration method used to establish even-aged stands whereby all merchantable trees are removed in one harvest. In a clearcut with reserve trees, this treatment would leave some trees standing of various diameters and species for specific objectives.
 - <u>Selection harvest cut</u>: a harvest system that removes trees individually in a scattered pattern or in small groups throughout the stand from the various size classes. Regeneration is established under the partial shade of the overstory canopy after each cut resulting in an uneven-aged, multi-structured stand.
 - <u>Thinning</u>: an intermediate treatment performed in an even-aged stand. A thinning removes the smaller trees that are less able to compete for light, so the larger, more vigorous trees remain after thinning.
 - Removal cut: a removal cut uncovers the new crop of trees, making the best use of the old crop to increase in value. There may be one or several removal cuttings with the objective to proceed so that the new crop fills the growing space as fast as the old crop is removed.
 - Shelterwood cut: the shelterwood method of regeneration involves the gradual removal of the entire stand in a series of partial cuttings that extend over a fraction of the rotation. Natural reproduction starts under the protection of the older stand and is finally released when it becomes desirable to give the new crop full use of the growing space.
- 2. Site preparation for natural regeneration of aspen or aspen and balsam fir would be conducted in harvested Aspen stands.
- 3. Planting of conifers in some aspen forest types and in shelterwood treatment stands.
- 4. Old growth classification: Approximately 1650 acres would be classified as old growth, of which approximately 290 acres would be classified as managed old growth and approximately 1360 acres as unmanaged old growth.
- 5. Wildlife habitat enhancement projects include:
 - Maintaining existing upland grass/forb openings (various stands in project area).
 - Mowing certain Forest Roads.
 - Scarifying some sites for seeding or natural regeneration of conifers to increase the hemlock, cedar, and white pine presence in existing conifer stands.
 - Hand-cutting small patches of tag alder adjacent to aspen stands to rejuvenate woodcock habitat.
 - Add/create large coarse woody debris to some of the harvested aspen stands for grouse and other species.
- 6. Fish habitat enhancement projects include:
 - The addition of large woody debris at selected sites in the Baltimore River between O Kun de Kun Falls and the mouth of the Baltimore where it flows into the Middle Branch of the Ontonagon River.
- 7. Watershed restoration projects include:
 - Designation and repair of only one vehicle crossing to be used on Lathrop Creek, which is the southernmost crossing in section 23 that will only be open to ATVs and snowmobiles following treatment activities.
 - Decommissioning and rehabilitation of two Lathrop Creek crossings due to resource and erosion concerns.
 - Improvement, rehabilitation, and erosion control work at all three Lathrop Creek crossings to improve channel stability, aquatic habitat, and enhance overall watershed conditions and allow the floodplain to function.

- 8. Transportation projects include:
 - Approximately 1.1 miles of new road construction that will consist of clearing trees and brush, grubbing stumps, placement of aggregate material, installing culverts and crossings, and shaping road prism.
 These roads will be closed by earthen berm upon completion of harvesting activities.
 - Approximately 25.2 miles of road reconstruction that will consist of clearing brush to widen the existing clearing, placement of aggregate material, install and/or repair culverts and crossings, shape road prism, and ditching where required.
 - Approximately 90.2 miles of road maintenance will consist of brushing, repair of culverts and crossings, and shaping of existing prism where necessary to facilitate drainage and runoff patterns.
 - Approximately 106.2 miles of road closures. Road closures will be accomplished with earthen berms or gates to prohibit passenger vehicle access. This would include the relocation of the gate on Forest Road 710. ATV and snowmobile use will be permitted on closed roads.
 - Approximately 28.1 miles of road decommissioning. Road decommissioning will occur through
 maintenance and repair of existing soil erosion problems, or potential soil erosion problems, by
 removing culverts, crossing structures, and construction of water bars where needed. It will also include
 berming the roads to prohibit passenger vehicle traffic and to allow for natural revegetation.
 - Approximately 2.6 miles of roads proposed to be "unclassified." These are roads no longer needed for long-term management of forest resources, but are access routes currently under special use permit or being used by leaseholders.
 - Culverts will be installed where needed to implement treatment activities. Following harvest activities
 culverts will be left in place to protect riparian resources and accommodate recreational ATV and
 snowmobile use.
 - Expansion of the Gauthier Gravel Pit to access an existing gravel source. This would provide materials
 necessary for construction, reconstruction, and maintenance of Forest system roads needed for longterm management of forest resources and multiple-use access.
- 9. Dispersed recreation projects include:
 - Hardening, enhancing, or developing some dispersed recreation camping sites adjacent to Forest Roads 730 and 733 to meet current and expected future demand.
 - Conversion of approximately 300 feet of existing unclassified road to a trail to protect resources while still allowing for Ontonagon River access.
 - Improvement of a small parking area near the Ontonagon River access site.
- 10. Providing for public health and safety would include:
 - Relocating a portion of snowmobile trail #3 that is currently located in the US highway 45 (US-45) right
 of way.

Design Criteria

In addition to the Forestwide Standards and Guidelines included in the Forest Plan (Pages IV 34 – IV 36), and the Best Management Practices recommended by Michigan's Department of Natural Resources (MI-DNR, 1994), site-specific design criteria will be implemented to offer additional protection to fish and wildlife habitat, water quality, and soil resources.

Attached Maps:

- A Vicinity map.
- B Existing Forest Types map.
- C Proposed Stand Treatments/Road Use/Old Growth Classification map.
- D Proposed Temporary Openings greater than 40 acres map.
- E Existing Transportation System map.
- F Proposed Transportation System map.
- G Connected Actions map.